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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,543	01/30/2004	Earl R. Foust	NEW.102CIPDIV	6617

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EXAMINER	
YIP, WINNIE S	
ART UNIT	**PAPER NUMBER**
3636	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/768,543	FOUST ET AL.	
	Examiner	Art Unit	
	Winnie Yip	3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to applicant's amendment filed on October 19, 2006.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

1. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. (US Patent No.6,092,341) in view of Rotondo et al. (US Patent No. 4,504,428).

Yamashita et al. teach a method for forming a concrete pole comprising steps of (see col. 2, lines 36-65): providing a mold (5) having two semicircular cross-section mold halves (6, 7), the mold halves (6, 7) being enclosed and tightly fastened together to form a mold (5) having two ends and an axis, a sleeve insert (13) disposed between the mold halves, a plurality of elongate strands being wound surrounded by a plurality of spiral stands and tied together to form a strand cage frame (4), the strand cage frame (4) being placed and encased into one of two mold halves, the other mold half being placed over the mold half to close the mold (5), the two mold halves than being tightly fastened together, the elongate strands being pneumatically tensioned properly at two ends of the mold (see col. 2, line 49), a web concrete is then casing into the mold by a pump (8) (see col. 2, line 51), after casing, the mold being rotated (or spinning) about its axis at speeds increasing gradually to centrifugally force the wet concrete flowing against an inner wall of the mold (5) to form a hollow concrete post having a compact outer wall with a hollow interior (11) therebetween, and allowing the concrete to curve and dry after the spinning and tensioning the strand to form the concrete pole (see col. 4, line 65), wherein, during the processing, the pole is inherently measured and shaped to ensure the wall thickness of outer wall

of the pole not less then a frail portion (14) as required (see col. 2, lines 39-68). Although Yamashia et al. do not specifically define a step of measuring the thickness of outer wall of the hollow concrete pole after stopping spinning, and adding additional wet concrete into the hollow interior of pole and spinning the mold again as claimed, Rotondo et al. teach, as know in the art, a method of forming a reinforcing concrete pole comprising steps of providing a mold having two mold halves (22a, 22b), a web concrete with reinforcing wires embedded therein being inserted into the mold, the mold then spinning about its axis to define a concrete post with a compact outer wall with a hollow interior therebetween, after stopping the spinning of the concrete pole, the thickness of the outer wall of the post was inherently measured because of the thickness of the outer wall is changed due to the retraction of the concrete material during the spinning, and an additional web concrete with embedded a plurality of second elongated reinforcing strands is added into the interior of the concrete post within the mold and spinning the mold again to form additional layer over the outer wall, the concrete pole is made in successive layers to form the outer wall with a predetermined and necessary thickness (see col. 1, lines 35-48). It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the method of forming a concrete pole of Yamashita at el., as known in the art, having step of spinning the mold to form a hollow concrete pole with a first layer of concrete outer wall, and after stop spinning, since the concrete outer wall may reduced thickness due to the necessary shirking of the concrete material, adding additional web concrete with second elongated reinforcing strands into the mold and spinning again to form a pole with successive layers over the outer wall to increase the necessary thickness of the outer wall of the

pole as taught by Rotondo et al. for achieve a hollow concrete pole with a suitable thickness through successive cycles.

Regard to claim 21, Yamashita et al. is considered to have the strand cage frame (4) comprising a plurality of elongate reinforcing strands including a plurality of first and second elongate reinforcing strands, and the spiral strands including a plurality of first and second spiral strands that tie to the correspond first and second elongated reinforcing strands respectively prior the insertion of the first layer of web concrete into the mold. Notice applicant does not specifically define positions of the first and second elongate reinforcing strands and the spiral strands embedding in first concrete outer wall.

2. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rotondo et al. (US Patent No. 4,504,428) in view of Yamashita et al. (US Patent No.6,092,341).

Rotondo et al. teach a method for forming a concrete pole comprising steps of: providing a mold (22) having two semicircular cross-section mold halves (22a, 22b), a sleeve insert (38) disposed between the mold halves, the mold halves and the sleeve inserts being bolted together to form a mold (22) having two ends and an axis, a plurality of elongate strands placed and encased between the sleeve insert and the mold halves, inserting concrete into the mold and spinning the mold about its axis to form a concrete pole with a compact outer wall with a hollow interior therebetween, after stopping the spinning of the concrete pole, the thickness of the outer wall of the post was inherently measured because of the thickness of the outer wall is changed due to the retraction of the concrete material during the spinning, and an additional web concrete is added into the interior of the concrete post within the mold and spinning the mold again to

form additional layer over the outer wall, the concrete pole is made in successive layers to form the outer wall with a predetermined and necessary thickness (see col. 1, lines 35-48). Although, Rotondo et al. does not define the plurality of elongate strands being wound surrounded by and tied to a plurality of the spiral strands, Yamashita et al. a method of forming a concrete pole comprising steps of: forming a strand cage frame (4) having a plurality of elongated strands being tied and wound surrounded by a plurality of spiral strands and the strand cage frame being placed and encased into the mold and embedded within the concrete outer wall to increase the straight of the concrete pole. It would have been obvious to one ordinary skill in the art, at the time the invention was made, to modify the method for forming a concrete pole of Rotondo et al. having a plurality of elongated strands being surrounded and tied by a plurality of spiral strands and the ends of the strands being tensioned to form a strand cage frame as taught by Yamashita et al. for holding the strands together to provide a stronger reinforcement support to the concrete pole.

Response to Arguments

3. Applicant's arguments filed October 19,2006 with respect to claims 20-23 have been considered but are moot in view of the new ground(s) of rejection.

Inquiry Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 571-272-6870. The examiner can normally be reached on M-F (9:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Winnie Yip
Primary Examiner
Art Unit 3636

wsy
December 20, 2006